

2003 Utah Public Health Outcome Measures Report

December 2003

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Suggested Citation:

Office of the Executive Director. (2003). 2003 Utah Public Health Outcome Measures Report. Salt Lake City, UT: Utah Department of Health.

Part 1. Medicaid Benefits Change Impact Study

Executive Summary

Through intent language the Utah State Legislature asked the Department of Health to analyze the impact of recent changes in Medicaid benefits on individuals and families and potential cost shifting among health services. The Department has undertaken a comprehensive analysis of the impact of these changes on health care utilization and outcomes. This report contains highlights of the findings based on both a survey of Medicaid enrollees and analysis of Medicaid administrative data.

There were four principal types of changes in the Medicaid benefit structure in state fiscal years 2002 and 2003:

- g Rate Reductions:** Reimbursement rates were reduced for pharmacies and hospitals.
- g Program Changes:**
 - o The “7 Prescription Limit” triggered pharmacy review for high-volume pharmacy users.
 - o The Primary Care Network (PCN) enrollment began in July 2002. At this time, the Medicaid program also began making a distinction between Traditional and Non-Traditional enrollees. Non-Traditional enrollees are primarily parents of eligible children, while Traditional enrollees include pregnant women, children, and most blind, disabled, and elderly enrollees. Traditional, Non-Traditional, and Primary Care Network programs provided differing benefit levels. Non-Traditional enrollees were asked to make co-pays for some services, and experienced limitations on others.
- g Co-payments:** New or increased co-pays have been implemented for most fee-for-service Medicaid enrollees for physician services, outpatient services, pharmacy and inpatient hospitalizations.
- g Changes in Coverage:** For most adults, dental and vision-related care are no longer covered; podiatry coverage was reduced, then partially restored; and coverage for speech and hearing-related services, and physical and occupational therapy was eliminated, but has been restored as of July 1, 2003.

These changes were intended to reduce costs and decrease inappropriate utilization through cost-sharing.

Summary of the findings are presented as follows:

- g Utilization Summary** – In most cases, the utilization analyses show that the co-pay requirements had no statistically significant impact on utilization. However, in a few cases, there are statistically significant decreases in utilization at the time of implementation or increases in the co-pays, notably:
 - o A decrease of about 30 prescriptions per week per 1,000 enrollees for Non-Traditional enrollees at the time of the increase to a \$2 co-pay.
 - o A decrease of about 21 outpatient claims per month per 1,000 enrollees for Traditional enrollees at the implementation of the \$2 co-pay.
 - o No increase in emergency room dental claims when dental coverage was eliminated.
- g Survey Results Summary** – Several survey questions address the human toll of the changes.
 - o **Co-pays:** In general the survey results show that for the majority of enrollees the co-pays were not a burden and accomplished the stated objectives. However, for a subset of the population the co-pays for physician services and pharmacy created a financial burden.
 - o **Changes in Coverage:** The survey suggests that among the services that are no longer covered, loss of dental and vision services created the greatest hardship for enrollees. While some enrollees reported getting needed dental care by paying for it themselves, a greater number had dental needs that were not addressed, primarily due to inability to pay.
 - o **Coping Strategies:** Respondents reported employing a broad range of coping strategies, including cutting back on overall consumption of goods and services, as well as expenditures for non-essentials in nutrition and non-health commodities.

Methodology

Two primary data sources were used in the analysis: the Medicaid administrative data and Medicaid Benefits Survey.

Medicaid Administrative Data

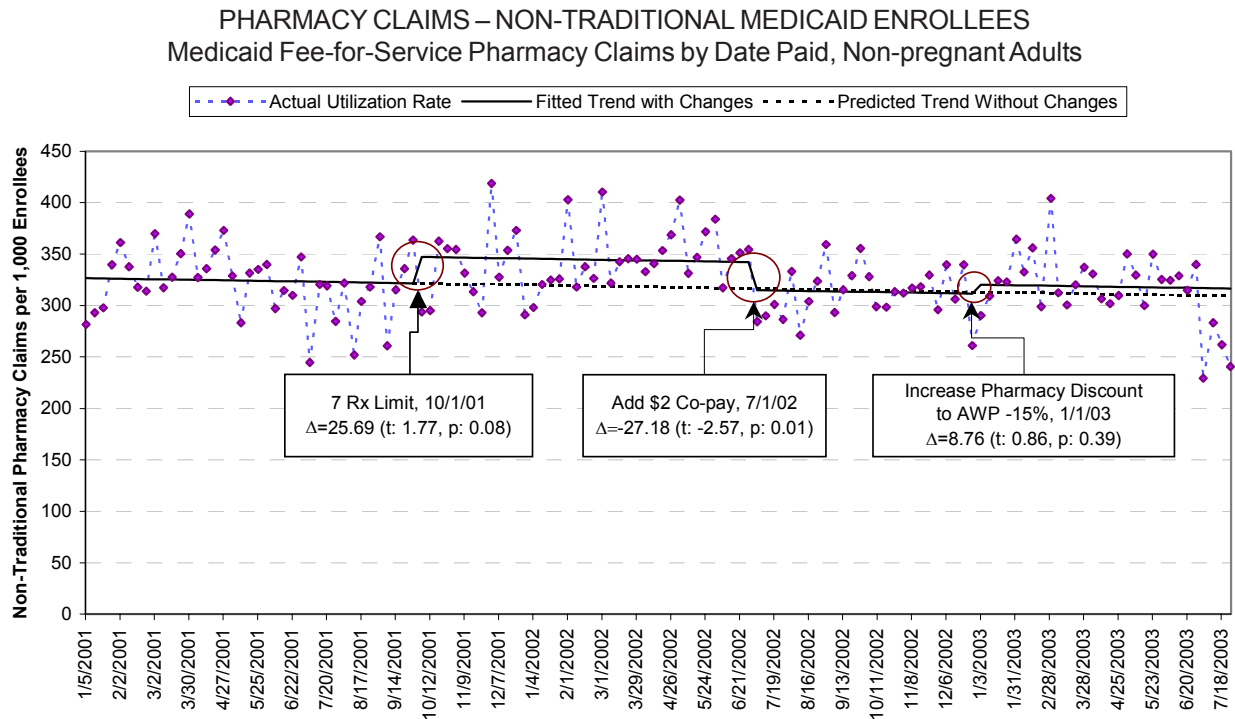
- 9 *Medicaid Data Warehouse* – The Division of Health Care Financing maintains a comprehensive database of Medicaid claims. The database contains information about the procedures performed, the provider, and the enrollee receiving treatment, as well as payment and other financial information about the claim.
- 9 *Fee-for-Service Only* – At present, the Data Warehouse does not contain data for claims processed by health plans that provide services to Medicaid enrollees through HMO capitated contractual arrangements. As a result, the findings of these analyses apply only to Medicaid fee-for-service enrollees, and not to the entire population of Medicaid enrollees.
- 9 *Intervention Analysis* – The primary statistical method used to analyze the utilization data is an intervention analysis model that identifies and separates the overall trend of the data (the “time series” component) from the changes in the trend that can be attributed to the changes in Medicaid benefits (the “intervention”). In the graphs presenting those results, we have included the original data, a line that indicates the predicted trend in the absence of interventions, and a fitted trend line with the interventions. The estimated magnitude of the effect of the interventions on the trend is given, along with inferential statistics. Statistical significance is determined using a 5% confidence level.

The Medicaid Benefits Survey

- 9 *The Focus Groups* – Focus groups were conducted in six cities (Brigham City, Gunnison, Layton, Provo, Salt Lake City, and Roosevelt) to aid in development of the survey questionnaire. Results of those groups identified issues that required further study. About twelve Medicaid enrollees who had either called to complain about the changes or who had recently used services affected by the changes were invited to participate in hour-long sessions discussing the impact of the changes in Medicaid benefits on them and their families in July 2003.
- 9 *The Survey Instrument* – A four-page paper-and-pencil (mail) survey contained 27 questions covering enrollees’ experiences with the changes in benefits. We also included questions related to health status and health care utilization.
- 9 *The Sampling Frame* – The sampling frame included Medicaid enrollees age 19 or over who had been continuously enrolled for the previous six months. Medicare recipients, institutionalized persons, and persons receiving benefits through the “pregnant women and infants” aid category were excluded from the survey sample because the changes would not likely have applied to them. There were approximately 23,200 enrollees in the remaining categories. Because it is possible for enrollees not meeting these guidelines to be in some of the other aid categories, we asked a question on the survey to verify eligibility. Eighty-one percent of the respondents reported meeting all of the eligibility criteria. This survey is representative of about 18,750 Medicaid enrollees. Since those surveyed are a random sample of eligible enrollees, percentages from the survey can be used to estimate impacts on the entire population of affected Medicaid enrollees.
- 9 *The Survey Protocol* – The first wave of the surveys was mailed to 600 randomly selected enrollees on August 20, 2003. Eleven surveys were returned undeliverable. Of the remaining 589, 401 completed surveys were returned by the cut-off date of September 24, 2003 giving a response rate of 68%. A total of 324 met the eligibility criteria. 51% of these respondents were Traditional enrollees and 49% were Non-Traditional enrollees (compared to 53% Traditional vs. 47% Non-Traditional in the sampling frame).

The Impact of Changes in Pharmacy Benefits on Utilization

Recent changes in Medicaid pharmacy benefits were designed to share costs and encourage more appropriate utilization. A recent study by the Office of Health Care Statistics examines how these changes in benefits have impacted pharmacy utilization by Non-Traditional Medicaid enrollees.



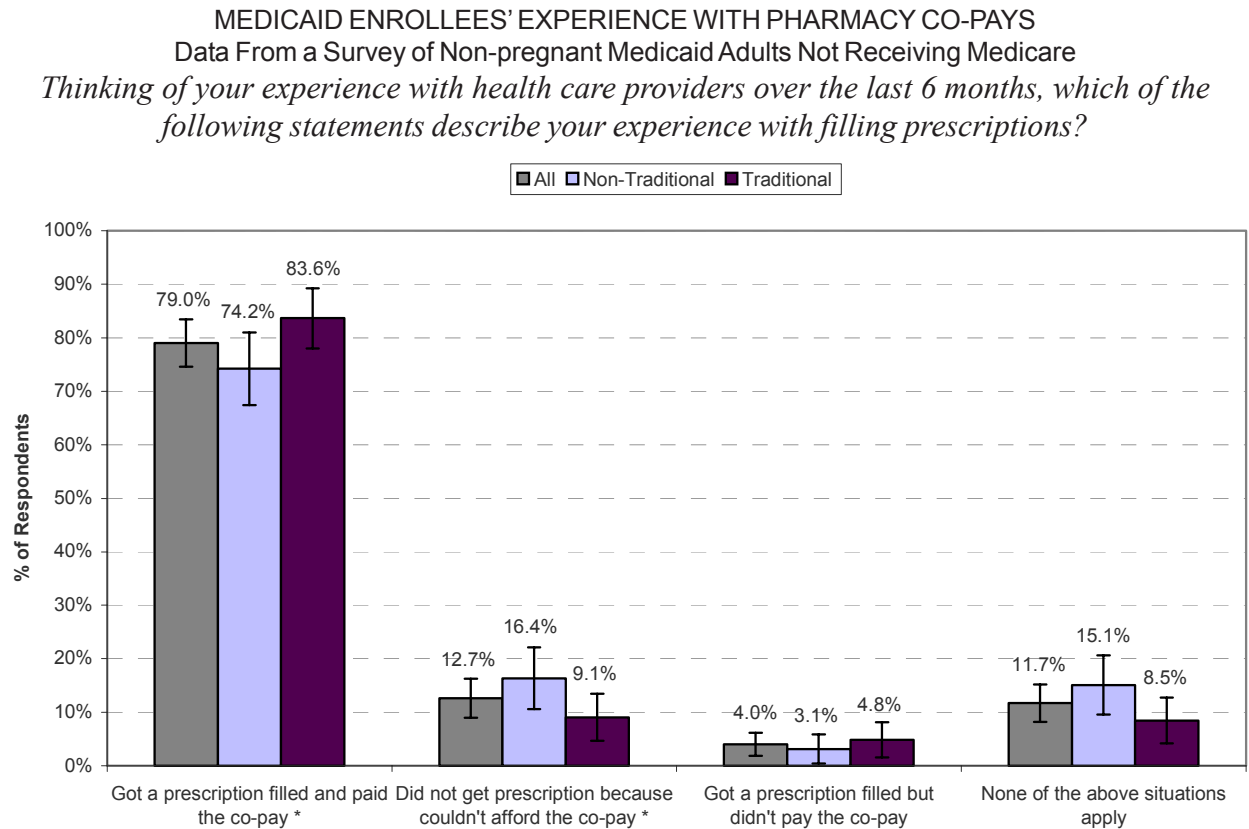
Notes:

1. The data are weekly data on pharmacy utilization rates (per 1,000 enrollees) calculated using Medicaid administrative data.
2. The trend lines are from an intervention analysis model. This model identifies and separates the overall trend of utilization from the changes in that trend that can be attributed to the changes in Medicaid benefits.

- g** In October 2001, Medicaid began requiring a pharmacy review for any enrollee receiving more than seven prescriptions. Contrary to what one would expect, the analysis revealed a slight increase in utilization that immediately followed this change, however, it was small and not statistically significant ($p=0.08$).
- g** In July 2002, Medicaid divided enrollees into three programs: Traditional, Non-Traditional, and PCN. Non-Traditional patients were required to pay a \$2 co-pay for each prescription filled. Additionally, Non-Traditional patients were required to receive generic substitutes in some cases, and there were some limitations on the drugs that were available. The statistical analysis shows a drop in utilization rates of about 30 claims per 1,000 enrollees at the time of this change. This change is statistically significant ($p=0.01$).
- g** In January 2003, Medicaid increased its pharmacy provider discount to be equal to Average Wholesale Price (AWP) minus 15%. There does not appear to be a significant change in utilization associated with this change.
- g** The model predicts a slight downward overall trend in pharmacy utilization occurring in the absence of changes.

The Impact of Changes in Pharmacy Co-pays on Enrollees' Experience

Analysis of data from a recent survey of Medicaid enrollees conducted by the Office of Health Care Statistics shows how pharmacy co-pays have impacted enrollees' experience with filling prescriptions.



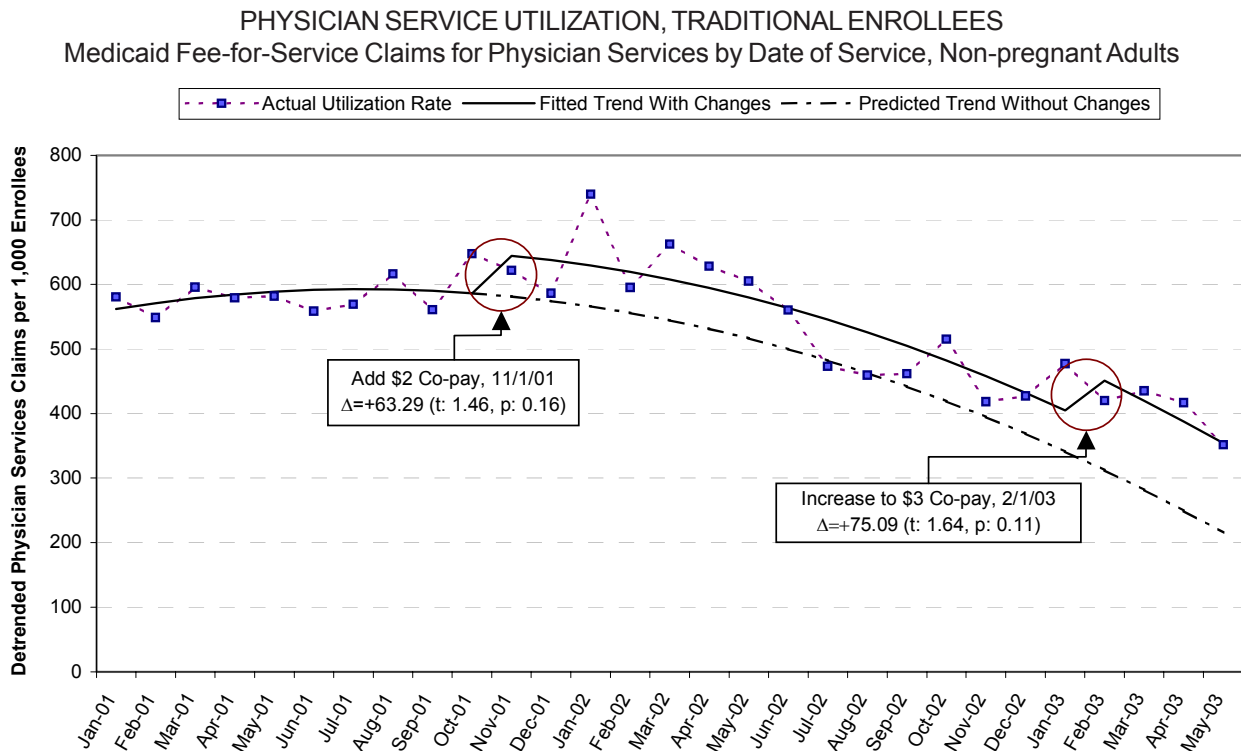
Notes:

1. The survey was administered by mail to a random sample of Medicaid enrollees in August-September, 2003. There were 324 usable surveys returned from 589 surveys sent. * indicates statistically significant (at 5% level) difference between Traditional and Non-Traditional enrollees.
2. Percentages add to more than 100% because respondents were asked to mark all situations that applied.

- g** 79% of the respondents reported having a prescription filled and paying the corresponding \$2 or \$3 co-pay. Traditional enrollees were more likely to have had a prescription filled and paid the co-pay than Non-Traditional enrollees.
- g** 13% of respondents reported not getting a prescription filled because they couldn't afford the co-pay. This corresponds to about 2,500 Medicaid enrollees. Non-Traditional enrollees were more likely than Traditional enrollees to have not had a prescription filled because they couldn't afford the co-pay.
- g** 4% of respondents reported being able to get the prescription filled without paying the co-pay. The most common reasons listed were that they were not asked and that they didn't have the money (about 1/3 each).
- g** 12% of respondents did not experience any of these situations, presumably because they did not need to fill a prescription.
- g** Responses to another survey question show that over half of the respondents were taking three or more medications at the time of the survey.

The Impact of Changes in Physician Services Co-pays on Utilization

Recently, Medicaid began to require some enrollees to pay small co-pays for physician services. These changes were designed to share costs and encourage more appropriate utilization. A recent study by the Office of Health Care Statistics examines how these co-pays have impacted utilization of physician services by Traditional Medicaid enrollees.



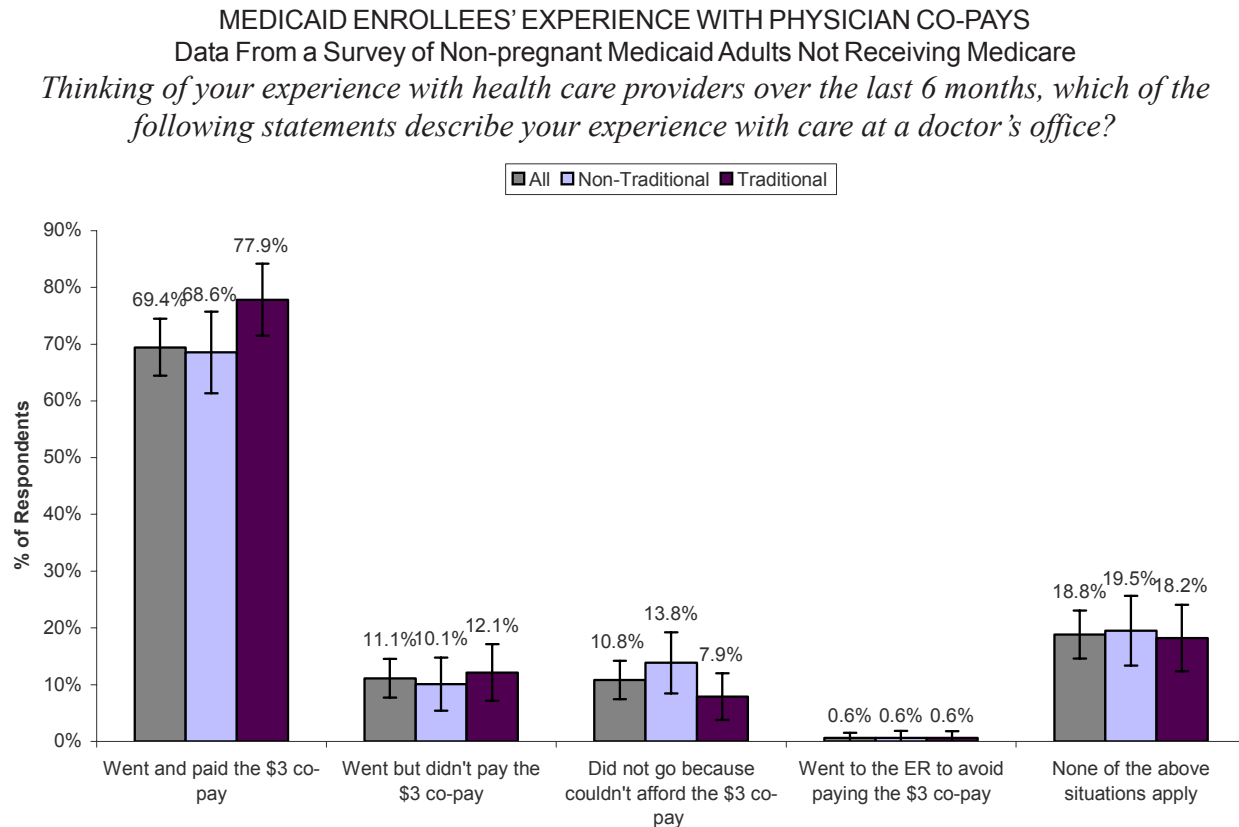
Notes:

1. The data are monthly data on physician services utilization rates (per 1,000 enrollees) calculated using Medicaid administrative data.
2. The trend lines are from an intervention analysis model. This model identifies and separates the overall trend of utilization from the changes in that trend that can be attributed to the changes in Medicaid benefits.

- g** In November 2001, Medicaid began requiring Traditional enrollees to pay a \$2 co-pay per visit, with a \$100 per year out-of-pocket limit. The statistical analysis revealed an increase in utilization immediately following this change, however, it was small and not statistically significant ($p=0.16$).
- g** In February 2003, Medicaid raised the physician services co-pay to \$3 per visit. Again, the statistical analysis revealed a slight increase in utilization at this time that was not statistically significant ($p=0.11$).
- g** The model predicts a downward trend in physician utilization that would have occurred in the absence of the changes in benefits. A likely cause is that Medicaid enrollments have been increasing and the newer enrollees were generally healthier than former enrollees, causing the average health to increase. Other possible causes include increasing difficulty in finding appropriate providers, a decrease in inappropriate utilization, an improvement in average enrollee health, an increase in the effectiveness of prescription drugs, and a shift toward treatment in other settings.
- g** The most important finding of this analysis was that there were no dramatic decreases in utilization associated with the implementation of the co-pays. This is consistent with the argument that the small co-pays are not significant barriers to needed care.

The Impact of Changes in Physician Services Co-pays on Enrollees' Experience

Analysis of data from a recent survey of Medicaid enrollees conducted by the Office of Health Care Statistics shows how physician services co-pays have impacted their experience with visiting a doctor's office or clinic.



Notes:

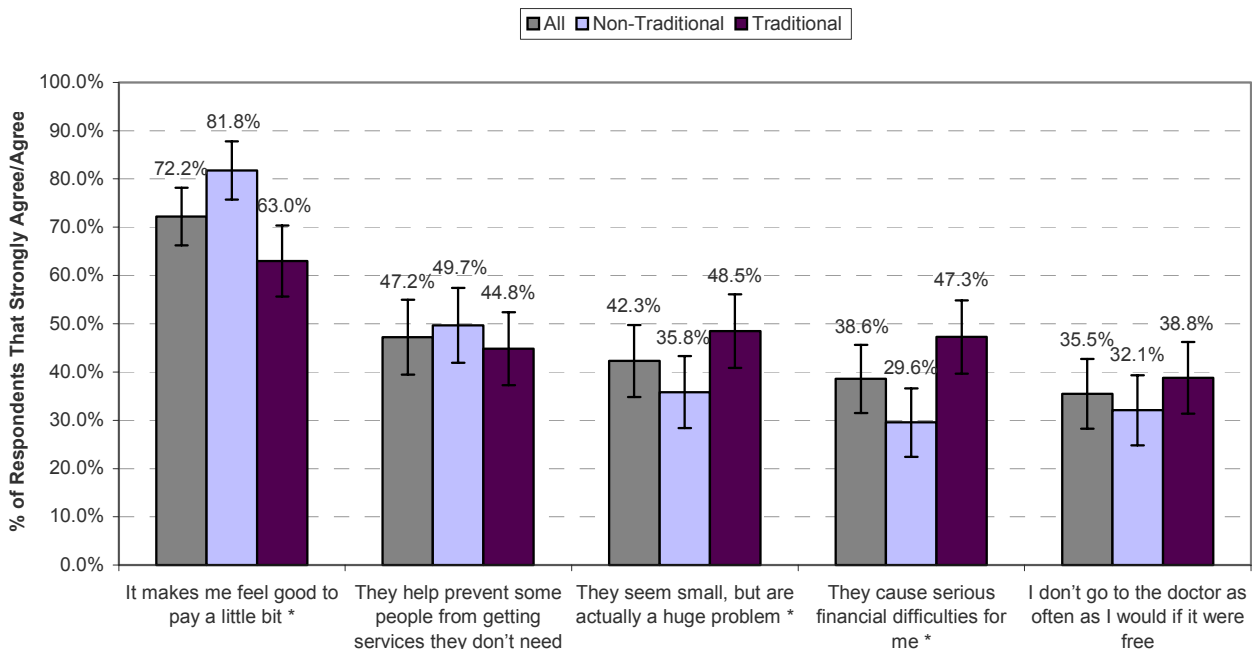
1. The survey was administered by mail to a random sample of Medicaid enrollees in August-September, 2003. There were 324 usable surveys returned from 589 surveys sent.
2. Percentages add to more than 100% because respondents marked all that applied.

- g** 70% of respondents reported having gone to a doctor's office and paying the corresponding \$3 co-pay.
- g** 11% of respondents reported not going to the doctor's office because they couldn't afford the co-pay. This corresponds to about 2,000 Medicaid enrollees.
- g** Of those who reported going to the doctor's office, but not paying the co-pay, the most common reasons listed were that they couldn't afford it (about 1/3), they were not asked to pay (about 1/5), and that they had other insurance that paid it (about 1/5).
- g** Less than 1% of enrollees reported that they should have gone to a doctor's office, but went to the Emergency Room to avoid the co-pay.
- g** 19% did not experience any of these situations, presumably because they did not need to go to a doctor's office.
- g** Responses to another question show that about half of the respondents had seen a doctor in the previous four weeks, and among those about half went to a doctor's office or clinic more than once.

Enrollees' Subjective Evaluation of Co-pays

Co-pays for physician services and pharmacy are intended to share costs and encourage more appropriate utilization. In a recent survey of Medicaid enrollees conducted by the Office of Health Care Statistics, respondents were presented with selected statements about co-pays.

MEDICAID ENROLLEES' OPINIONS ABOUT CO-PAYS
Data From a Survey of Non-pregnant Medicaid Adults Not Receiving Medicare
Read the following statements about the co-pays for doctor visits and prescriptions. Do you Strongly Agree, Agree, Disagree, or Strongly Disagree?



Notes:

1. The survey was administered by mail to a random sample of Medicaid enrollees in August-September, 2003. There were 324 usable surveys returned from 589 surveys sent.
2. Percentages add to more than 100% because respondents marked all that applied.

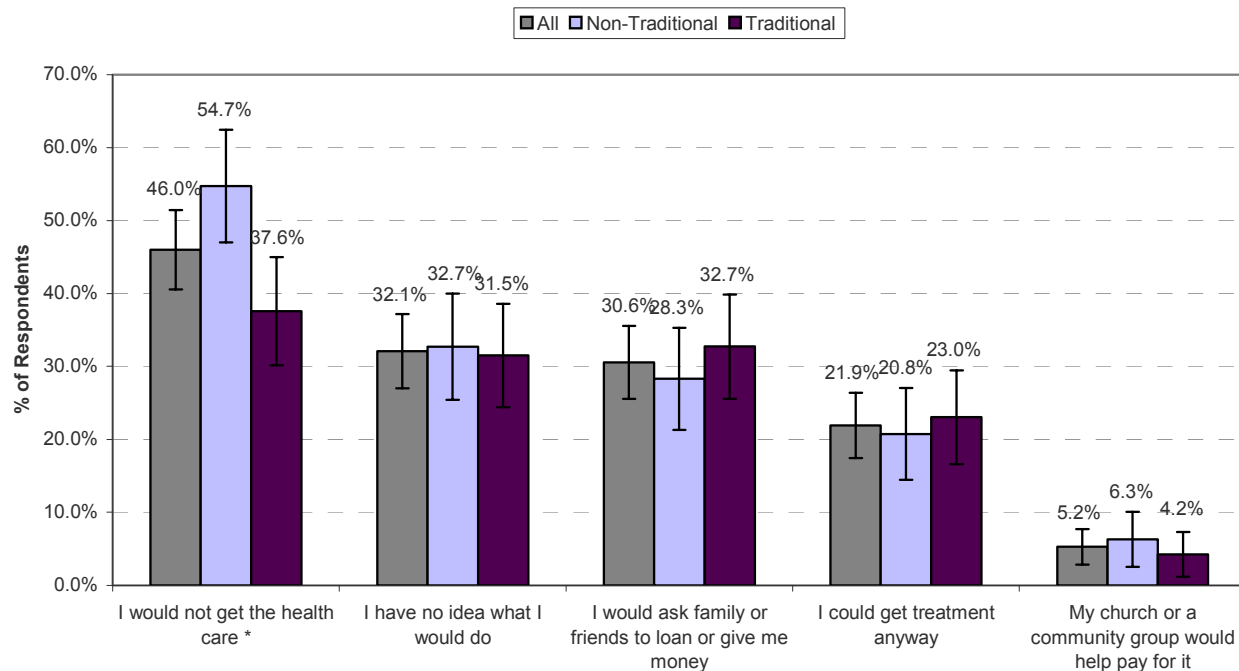
- 9 Co-participation:** 72% of respondents indicated that they agreed or strongly agreed that it made them feel good to be able to contribute toward their health care. Non-Traditional enrollees were more likely than Traditional to agree with this statement.
- 9 Encourage More Appropriate Care:** 47% agreed or strongly agreed that co-pays are effective in limiting inappropriate care.
- 9 Financial Difficulty:**
 - 42% agreed or strongly agreed that while co-pays are small, they present a huge problem. This corresponds to about 8,000 Medicaid enrollees.
 - Similarly, 39% agreed or strongly agreed that the co-pays cause serious financial difficulties.
 - Traditional enrollees were more likely than Non-Traditional enrollees to agree with these statements.
- 9 Utilization:** 36% agreed or strongly agreed that the co-pays cause them to go to the doctor less often.
- 9 Summary:** The majority of respondents agreed with the co-participation approach to co-pays. However, about two-fifths expressed concerns about potential financial difficulties associated with the co-pays.

Enrollees' Perceptions About the Impact of Co-pays on Health Care Access

Analysis of data from a recent survey of Medicaid enrollees conducted by the Office of Health Care Statistics shows what enrollees perceive would happen to them if they were not able to afford the co-pays for physician services and pharmacy. For many enrollees this question is hypothetical.

MEDICAID ENROLLEES' PERCEPTIONS ABOUT CO-PAYS AND ACCESS Data From a Survey of Non-pregnant Medicaid Adults Not Receiving Medicare

When you need care from a doctor or need a prescription but don't have the money for the co-pay, which of the following would probably happen?



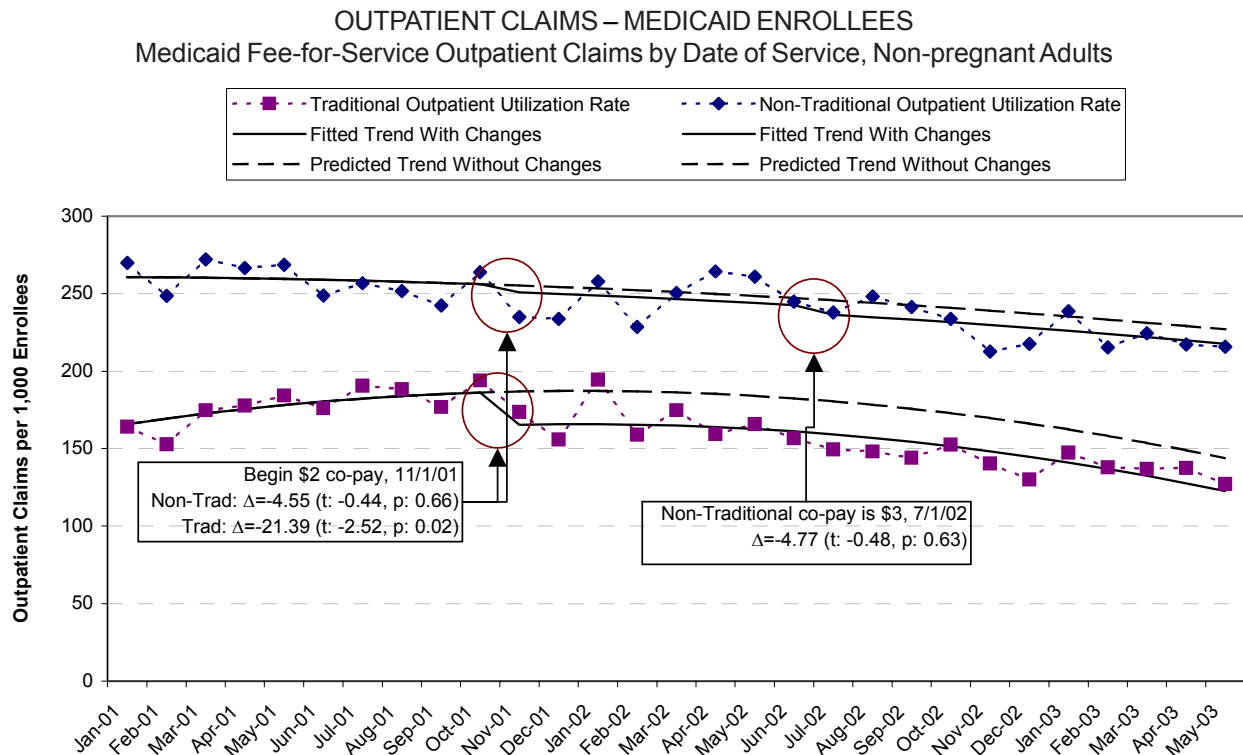
Notes:

1. The survey was administered by mail to a random sample of Medicaid enrollees in August-September, 2003. There were 324 usable surveys returned from 589 surveys sent. * indicates statistically significant (at 5% level) difference between Traditional and Non-Traditional enrollees.
2. Some categories were combined for expositional purposes.
3. Percentages add to more than 100% because respondents marked all that applied.

- 9 The most common response was that the enrollees would probably not get needed health care if they didn't have the money for the physician or pharmacy co-pays. Yet, in two separate questions, only 13% report having not filled a prescription and 11% report not having gone to see a doctor because they couldn't afford the co-pays. About one-third of respondents indicate that they do not know what they would do if they couldn't afford the co-pays. This suggests that many enrollees have not experienced this situation.
- 9 Non-Traditional clients are statistically more likely to expect that they wouldn't get care if they couldn't afford the co-pay than are Traditional clients.
- 9 31% of respondents expect that they could get money from family or friends if needed.
- 9 22% expect that a provider would still be available, either because they would be treated for free or the doctor or pharmacist would work with them.
- 9 5% of respondents expect that church or community groups would help pay for the co-pays for pharmacy or physician services.

The Impact of Changes in Outpatient Co-pays on Utilization

Recently, Medicaid began to require some enrollees to pay small co-pays for outpatient services. These changes were designed to share costs and encourage more appropriate utilization. A recent study by the Office of Health Care Statistics examines how these co-pays have impacted utilization of outpatient services by Medicaid enrollees.



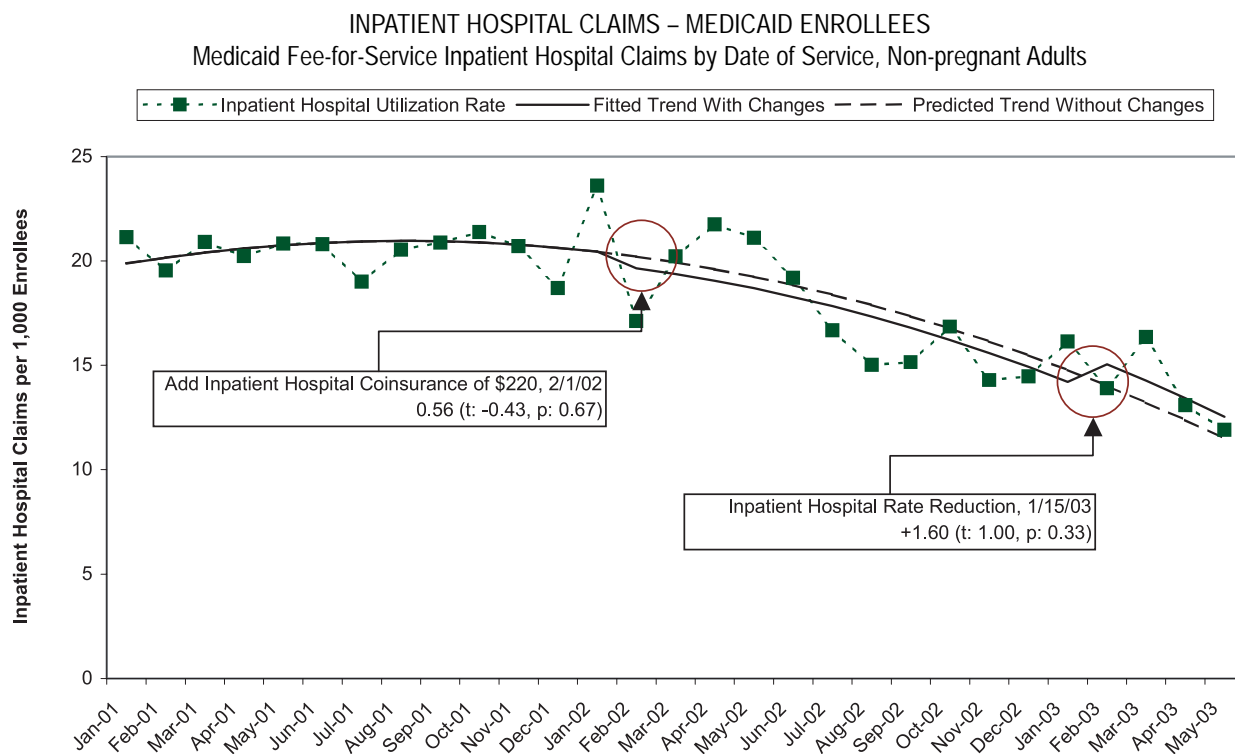
Notes:

1. The data are monthly data on outpatient services utilization rates (per 1,000 enrollees) calculated using Medicaid administrative data.
2. The trend lines are from an intervention analysis model. This model identifies and separates the overall trend of utilization from the changes in that trend that can be attributed to the changes in Medicaid benefits.

- g** In November 2001, Medicaid began requiring enrollees to pay a \$2 co-pay per outpatient visit. The statistical analysis shows a significant decrease in utilization by traditional enrollees of about 21 claims per 1,000 ($p=0.02$), but no significant effect for Non-Traditional enrollees.
- g** In July 2002, Medicaid made program distinctions between Traditional, Non-traditional, and PCN enrollees, and increased the outpatient services co-pay for Non-Traditional enrollees to \$3. Again, the statistical analysis shows no significant change in utilization for the Non-Traditional enrollees ($p=0.63$).
- g** The most important finding of this analysis is that there was a significant decrease in utilization of outpatient services associated with cost-sharing increases for Traditional Medicaid enrollees, but not for Non-Traditional enrollees.
- g** In a recent survey of Medicaid enrollees only 16% of respondents indicated that removing the \$2 co-pay for outpatient services be of “Most” help to them, the lowest rating of any of the changes covered by the survey.

The Impact of Changes in Inpatient Hospital Coinsurance on Utilization

Recent changes in Medicaid inpatient hospital benefits were designed to share costs and encourage more appropriate utilization. A recent study by the Office of Health Care Statistics examines how these changes in benefits have inpatient hospital utilization by Medicaid enrollees.



Notes:

1. The data are monthly data on inpatient hospital services utilization rates (per 1,000 enrollees) calculated using Medicaid administrative data.
2. The trend lines are from an intervention analysis model. This model identifies and separates the overall trend of utilization from the changes in that trend that can be attributed to the changes in Medicaid benefits.

- ◆ In February 2002, Medicaid began requiring enrollees to pay a \$220 coinsurance for each inpatient hospitalization. The statistical analysis shows a temporary increase in hospitalizations right before the change, followed by a temporary decrease in hospitalizations right after the change. However, there is no statistically significant ($p=0.67$) evidence of a permanent change in the trend due to the hospital co-pay.
- ◆ In January 2003, Medicaid reduced its hospital reimbursement rate as a cost savings device. The statistical analysis shows an increase in utilization at that time, but it is not statistically significant ($p=0.33$).
- ◆ The most important finding of this analysis is that there were no dramatic decreases in utilization associated with the implementation of the inpatient coinsurance. This is consistent with the argument that the coinsurance is not a significant barrier to needed hospital care.
- ◆ Part of the reason that the coinsurance doesn't seem to impact utilization may be that hospitals frequently do not collect it. In a recent survey of Medicaid enrollees, respondents who were hospitalized in the last six months for scheduled services were about four times more likely to report not paying the coinsurance as paying it – 4 respondents reported paying it versus 17 that reported not paying it (out of 324 enrollees responding to the survey).

The Impact of Changes in Dental Benefits on Enrollees' Experience

On June 1, 2002, Medicaid limited dental coverage for non-pregnant adults to the treatment of pain and infection. Preventive and restorative care is no longer a covered benefit. A recent study by the Office of Health Care Statistics uses survey data and administrative data to estimate the impact on enrollees.

MEDICAID ENROLLEES' EXPERIENCE WITH DENTAL CARE Data From a Survey of Non-pregnant Medicaid Adults Not Receiving Medicare

In the past 6 months have you paid out of your own pocket for any of the following health care? If Yes, how much?

	Dental Care: % Yes	Average (Median)
All Respondents	34.4%	\$200
Non-Traditional	36.7%	\$250
Traditional	28.7%	\$157

Are there any health care services that you need right now but you are not getting because Medicaid doesn't cover it and you can't afford to pay for them on your own? How much would it cost to get all of the health care you need that is not covered by Medicaid?

	Dental Care: (% Yes)	Estimated Total Cost of Needed Dental Care (% of Responses > \$500)
All Respondents	69.4%	54.3%
Non-Traditional	79.3%	57.1%
Traditional	60.0%	50.0%

Notes:

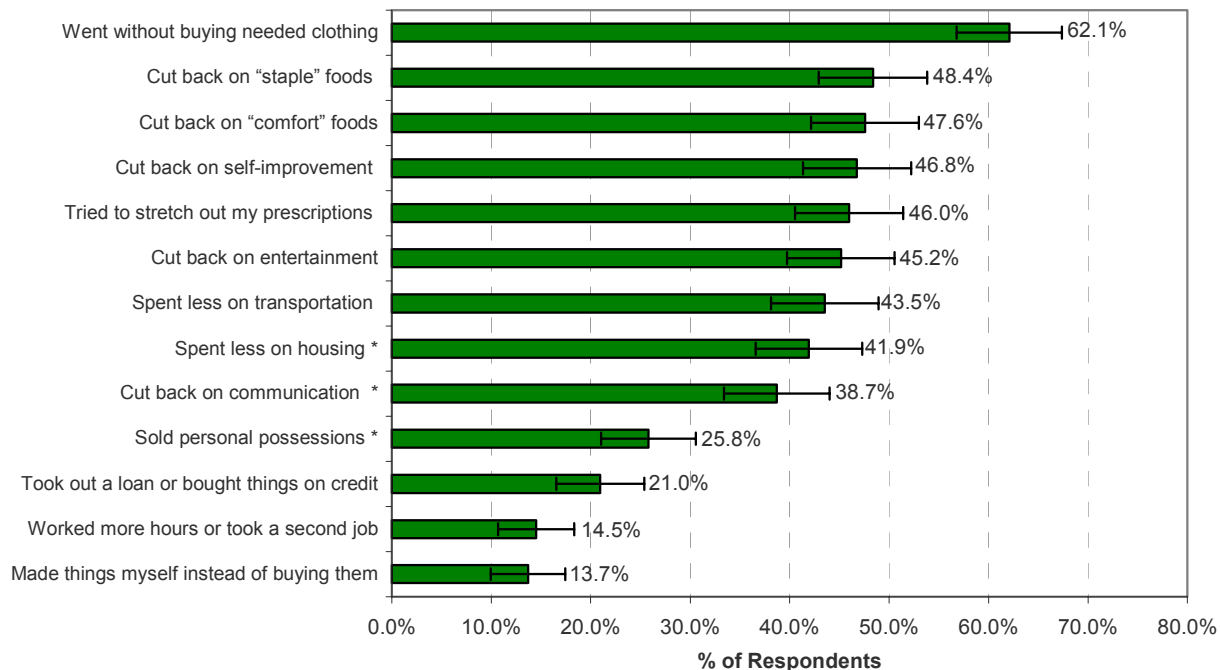
1. The survey was administered by mail to a random sample of Medicaid enrollees in August-September, 2003. There were 324 usable surveys returned from 589 surveys sent.

- g Survey Results:** Responses to the Medicaid Benefits Survey suggest that the reduction in dental care benefits has impacted enrollees the most of any of the changes.
 - o **Out-of-pocket Dental Expenses:** 34% of the respondents reported having paid for dental care out of their own pocket in the last six months (the highest rate of any services on the survey). The average (median) out-of-pocket payment was \$200.
 - o **Dental Care Not Received:** About 70% of respondents (corresponding to about 16,000 enrollees) reported needing dental care not covered by Medicaid that they could not afford. Of those who reported an estimate of how much this care would cost, over half reported that it would cost more than \$500.
 - o **Perceptions:** When asked which changes in Medicaid would help them the most, 81% of the respondents gave "Cover adult dental care" the highest rating. This was the highest percentage of any of the choices listed. (See chart on last page of this section.)
- g Utilization:** In a separate study of utilization using Medicaid administrative data, the Office of Health Care Statistics compared the utilization rates of dental care and emergency room dental care before and after the change in benefits. As one would expect, dental claims and costs per enrollee fell dramatically for the non-pregnant adult population after this change. However, there is no evidence of cost shifting to more expensive emergency room dental use immediately after this change took place.

Strategies Enrollees Employ When Health Care Expenses Cause Difficulties

In a recent survey of Medicaid enrollees by the Office of Health Care Statistics, 38% of respondents indicated that there was a time in the past six months when they had to pay so much for health care that they had to cut back in other areas. Analysis of their responses documents the coping strategies they employ.

MEDICAID ENROLLEES' COPING STRATEGIES
Data From a Survey of Non-pregnant Medicaid Adults Not Receiving Medicare
When your health care expenses forced you to cut back on other things, which of the following did you do?



Notes:

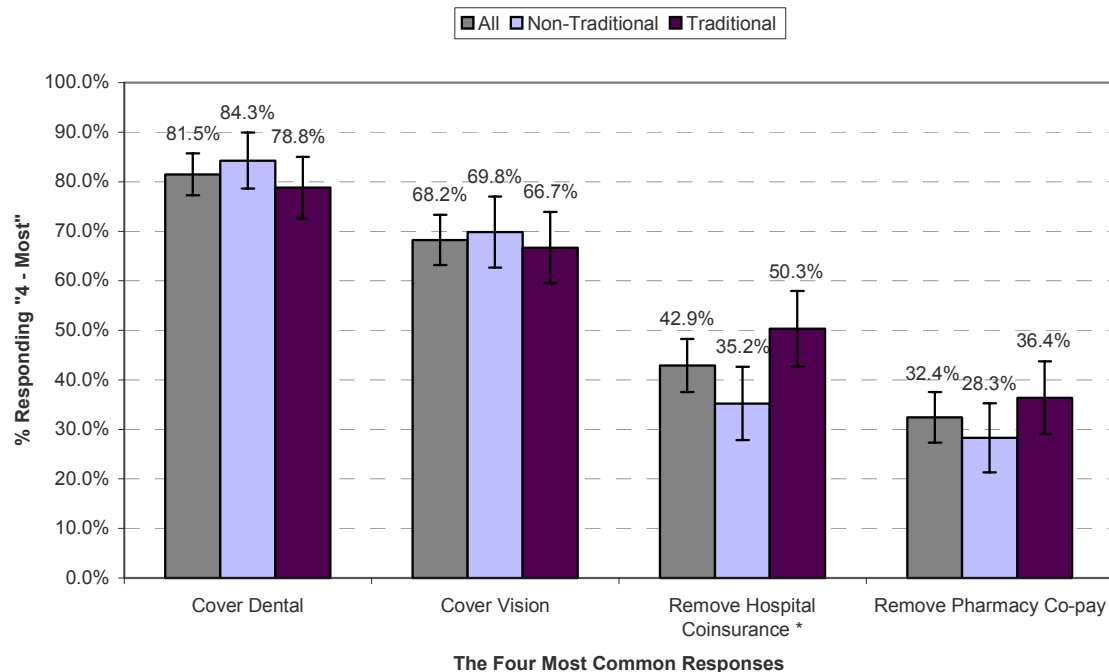
1. The survey was administered by mail to a random sample of Medicaid enrollees in August-September, 2003. There were 324 usable surveys returned from 589 surveys sent. * indicates statistically significant (at 5% level) difference between Traditional and Non-Traditional enrollees.
2. These results are based on the surveys of 124 respondents that indicated that health care expenses had forced them to cut back.
3. Percentages add to more than 100% because respondents marked all that applied.

- 9 38% of Medicaid enrollees have experienced health care costs that forced them to cut back in other areas. This corresponds to roughly 7,000 Medicaid enrollees.
- 9 When they were forced to cut back, respondents reported employing a broad range of coping strategies, including cutting back on overall consumption of goods and services as well as nonessentials.
- 9 Coping strategies associated with increasing productivity were among the least commonly reported.
- 9 Non-Traditional enrollees were statistically more likely than Traditional enrollees to spend less on housing (54% vs. 29%), cut back on communication 48% vs. 29%), and sell personal possessions (32% vs. 19%). Other differences were not statistically significant.
- 9 The survey did not address the intensity of these coping strategies.

Enrollees' Subjective Evaluation of Priorities for Restoring Benefits

In a recent survey of Medicaid enrollees conducted by the Office of Health Care Statistics, respondents were asked to evaluate the value of restoring selected benefits.

MEDICAID ENROLLEES' PERCEPTION ABOUT RESTORING BENEFITS
 Data From a Survey of Non-pregnant Medicaid Adults Not Receiving Medicare
*If Medicaid could make any of the changes listed below, how much would each of them help you?
 Please use a scale of 0 to 4 where 0 would help you the least and 4 would help you the most.*



Notes:

1. Respondents were asked which of the seven listed changes would benefit them the most (on a scale of 0 to 4). Categories not shown are "Cover Podiatry," "Remove Physician Co-pay," and "Remove Outpatient Co-pay." % Responding "4 - Most" is less than 25% for each.
2. The survey was administered by mail to a random sample of Medicaid enrollees in August-September, 2003. There were 324 usable surveys returned from 589 surveys sent. * indicates statistically significant (at 5% level) difference between Traditional and Non-Traditional enrollees.

- g Responses to the Medicaid Benefits Survey suggest that restoring dental and vision benefits would be of the most help to Medicaid enrollees. Over 80% of respondents identified dental coverage as helping them the most. Almost 70% said that restoring vision coverage would help them the most.
- g 8% of respondents gave all seven benefit changes the highest rating, "4 – Most." Traditional enrollees were more likely than Non-Traditional enrollees (10% vs. 6%) to have given every category the highest rating.
- g Less than 25% of respondents gave the highest rating to covering podiatry, or removing the co-pays for physician and outpatient service.

The Medicaid Benefits Change Impact Study was conducted by the Utah Department of Health, Office of Health Care Statistics (OHCS). For more information, contact OHCS at (801) 538-7048.

